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## **Insights with Paolo Soleri**

"Paolo Soleri is a Scottsdalian who has been familiar with this valley for over 50 years. Paolo first came to the Scottsdale in 1947 as an apprentice to Frank Lloyd Wright at Taliesin West. After that experience and building his first house, a very interesting and important Dome House in Cave Creek, he moved back to Italy with his new bride and spent five years in Italy trying to establish himself as an architect. There again, he built a major architectural work in terms of a ceramics factory on the Amalfi coast. But in 1955 he returned to the U.S. and in 1956 he settled on five acres in what is now the incorporated Town of Paradise Valley. Paolo still lives in a little pink wood house at 6433 Doubletree Road. From there he has become known globally as an urban visionary, and the inventor idea, 'arcology', a word that fuses architecture and ecology

In 1970, he began to build the smallest of his 'arcology' designs called Arcosanti at Cordes Junction, an hour and a half north from here. In the 30 years since, he has had the opportunity to understand better the dimensions of his vision, to watch its evolution, as well as observe what has happened locally and around the world. It's an exceptional opportunity to have present in our community someone with these extraordinary experiences and insights: Paolo Soleri.

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Paolo: "Usually I have 300 slides but I will be frugal. I'm presenting this single slide at the beginning because I have a way of thinking that you might not consider normal. This diagram suggests another way to position ourselves within reality. There are four bubbles: The largest, the Cosmic Relevance bubble is as big as the cosmos to date. The next, the Evolutionary Coherence bubble is the summation of all biospheres peppering the cosmos up to date. The Historical Fitness bubble is as big as the summation of human history; and the smallest, the Political Correctness bubble is as big as the USA today.

The largest is the Cosmic bubble. The one inside is the Evolutionary Coherence bubble, which is tinytiny compared to the Cosmic bubble. So there is no scale involved. In that cosmic scale, the Evolutionary bubble is invisible. Then this Evolutionary bubble surrounds the Historical Fitness bubble, which is the reality that we have been building as humans on this planet. Inside this Historical bubble there is a smaller bubble, which I call the Political Correctness bubble, which is the present as we conceive it, as we live it, and as we build it.

The point I'm making is that, depending on where we put ourselves, we might come with different notions about things and how to behave. In the present, most of the time we act as political animals and we like to be correct. That goes for a number of limitations because in order to be correct we have to compromise constantly and we do, day after day. If we stay with that kind of perspective, our lives and our behavior take a certain form, a certain shape with certain values. If now and then we try to look further than that and to see ourselves as historical beings, then our perspectives can be altered somehow, so that things that are correct there, might not be meaningful here. That means we are beginning to open up our lives to what happened not only yesterday, but the day before yesterday.

The American people for instance have two hundred or so years of history. But then those two bubbles are within the biosphere so that suggests the biosphere.

Once we are able to perforate, to penetrate, or to look at the Evolutionary bubble, we are surprised that our biosphere, which we see as very important, and indeed vital, is virtually invisible. Unfortunately, we come from our biosphere, so if we fail to recognize this presence, we will fail, and that's one of the problems we have. If now we can reach even beyond the Evolutionary bubble, then get presented with something we can hardly understand, we can hardly conceive, we are stardust. So we really come from there, and we are there, and that's inescapable.

By the way, all the bubbles have one point in common, which is the present. And depending on where we position ourselves even in the present, we have different perspectives. So what we are doing in the inner two bubbles might be insignificant. But if we want to become significant for ourselves, eventually we have to cope in this outside bubble, Cosmic Relevance. That's inescapable.

To repeat this premise, the Politically Correct bubble is as big as the USA today. The Historical Fitness bubble is as big as the summation of the human history. The Evolutionary bubble is as big as the summation of all biospheres peppering the cosmos to date. And the Cosmic bubble is as large as science and our imaginations can conceive the cosmos today".



Jeff: "If I could characterize one of the aspects of Paolo's reputation, it has been his ability to enlarge our frames of reference. So I'd like to raise the question about how we in this community can embrace these larger frames of reference. Especially when we live in a new community like Scottsdale, which has so little history, which has so little in terms of roots. In fact the whole purpose of this lecture series is to search for those roots."

Paolo: "We can face reality in two ways. One is being practical and the other is being realistic. There's enormous difference between the two, and naturally, since we live in the present, we say we are to be practical or else. The fact is that quite often the practical is the wrong thing. Since we have lessons coming from all sorts of domains, now and then, we should try to look beyond the practical and become realistic. That diagram points out that realism is not Political Correctness. It's far more telling and demanding than that. So when we are facing our problems personally, then as a society we may end up pursuing things, which are really really damaging ultimately. And ultimately for now, at the present, is not a hundred years from now, it is next year. One example is what we do with our land, and how we cope with the gridlock that

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we are moving into. Within that frame of reference, I'm thinking that one of the most telling and possibly damaging things that we are dealing with now is what I call hyper-consumption. We're all in it and I think we're all victimized by it. It would take many hours to go through a list of things that show how our practicality might be extremely pernicious in many, many ways."

Jeff: "Do you see any difference in how the folks in Scottsdale are practical, versus the folks in Phoenix, or the folks in Cincinnati?"

Paolo: "Not really. The reason is that we are developed as a society, as a nation, with fulfillment by materialism or hyper-consumption. So as long as this is the connection, we are going to face terrible problems. We are facing them now. The solution isn't going to be tomorrow, or day after tomorrow. It's going to be a long long process of undoing a number of things and slowly moving possibly in a direction that is not the direction we are going now, even if we remain within the boundary of this continent. If we open up to all countries, then we find there is a terrible question of equity that we are not facing at all. That's going to come back to us eventually."

Jeff: "But we don't have control. Those of us in this room certainly don't have control of the whole continent. Some of us even have a lot of difficulty getting ourselves from day to day. What directions should a community like Scottsdale take, what responsibilities can they shoulder against this, your first bubble embracing the whole American way of life?"

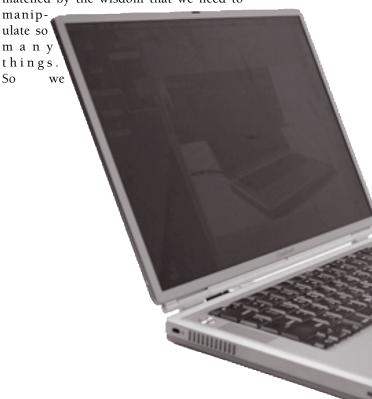
Paolo: "We are dealing with problems which are very fundamental, and there are no quick fix solutions. They are not available. In a way we have been making mistakes for many generations and it will take many generations to undo the mistakes, if we are willing. The price is very high for people in the habit of believing that in order to be a good citizen, we have to be good producers and good consumers. The whole structure of what we're doing physically and nonphysically reflects this dedication to what I call hyperconsumption. The sprawl that we are battling is a sprawl caused by acceptance of this hyper-consumption. The single home is quite evidently the most expensive, the most pollutant, the most wasteful and the most segregational thing we have ever done in our lives. So I don't think there is an answer to what we are battling now. Eventually we must alter our priorities, and then go from there. It will be pretty hard."

Jeff: "You're not very optimistic."

Paolo: "Nope. Not in short terms. In long terms, yes."

Jeff: "I guess I'm curious whether you see some differences between communities; especially on a regional basis and perhaps from a climatic point of view. Or maybe in terms of size. I'm not looking for any flattery for Scottsdale, but how do you see Scottsdale in relationship to the American pot?"

Paolo: "Scottsdale being a very young experiment, as all the virtues, and all the non-virtues of being very young: inexperienced, quite a bit of drive, enthusiasms, and the ability to make terrible mistakes. Often the mistakes are from the mentor. Moving from an existence of scarcity to an existence of super abundance, as we know it, throughout history, means that by gaining so much, we slowly seem to be losing very much in other directions. Thus directions of self responsibility, the direction of trying to connect yourself with larger and larger sectors of reality, including the territorial reality are slipping. Then there is the fact that we are manipulators of things, we are very good with our hands. So when we combine our hands, our larynx, communication, and the wonderful thing in our skull, we come off as Homo Fabor, the Maker, and we are still Homo Fabor more than Homo Sapiens in a way. Our skill to manipulate things is not matched by the wisdom that we need to



over-reach in terms of production and consumption, and we are underachievers in terms of knowledge and wisdom. The price to

pay is very high."

Jeff: "But looking at Scottsdale as an adolescent community without hardening of the arteries, isn't there the possibility of positive experimentation, as well as the possibility of making larger mistakes than other older communities. Isn't this an evolutionary possibility, because in effect it has been the past aberrations in the continuities of development, that have provided the future opportunities for better fitness?"

Paolo: "I think that entails a certain basic agreement about things. We tend to think two-dimensionally and there are reasons for that. We like the notion of being free and having a little domain to control including contact with nature and a few other things, most of which are romantic and nostalgic because they're unreachable. We're destroying that which we seek by how we behave. So if you take the car, as long as we think in terms of two-dimensional development of habitat, quite definitely we are making our present problems. That's a universal fact. We should be aware that we are dealing with thermodynamics, with gravity, and that there is a price for moving things, and it is not going to go away. Unfortunately we choose a technology, the automobile, which is enormously gigantic and is very expensive. To try to improve that situation I think is to try to improve what I call 'wrongness.' So the more that we improve wrongness, the more we get to the wrong side of the street. So this battle of how to control our spreading out, how to subdivide the land so that it might make sense has an element that is very protective because there's not an answer. The more we get attached to this notion of having a home which is continuously enlarging, becoming bigger and bigger, means it demands more from the productive side to fill it and make it comfortable. The more we do that, the more we need all the utilities and all the easements that development

requires. So we are developing what I call planetary hermitage where we become hermits within our small domain. Then we say we can handle all that because we can communicate through the Internet for instance. But we cannot eat in the Internet, we cannot do anything, which

is not virtual in the Internet, besides informing ourselves. So the real problem is that we do not want to accept the notion that a single home might be our nemesis."

Jeff: "You discuss Phoenix as a sort of prototypical American situation of extended suburb. I wonder if you have any thoughts about rural life, especially since you once experienced Scottsdale as few of us have, when it was just a crossroads. That's an enormous transition in the fifty years of your experience. Aren't we now operating in a very nostalgic way about what was once viable?"

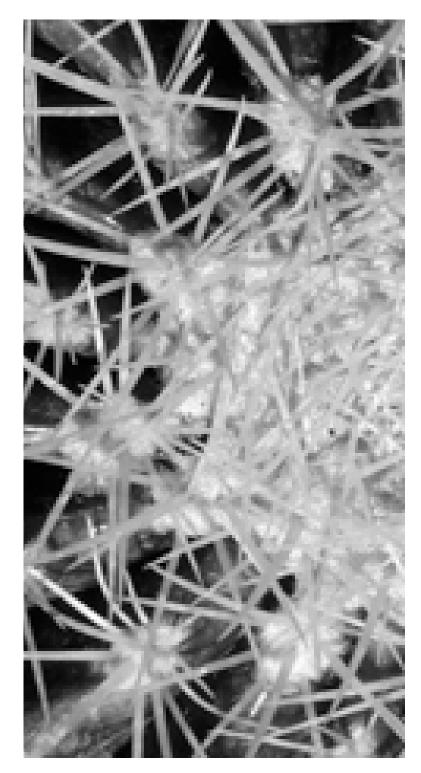
Paolo: "Yes, it's very natural for a population that has a whole planet available with lots of promises and lots of space to decide, that, since I'd like that little valley over there, I'm going to colonize that little valley there. But there are a thousand people or a million people who want to colonize the same little valley. So this is a development that is almost inerasable. We don't know what to do, how to behave so that this process might be slowed down and altered and maybe reversed. But that's a human condition. At a certain point, we might have to decide that we cannot say 'I do what I please'. We might have to say 'I should do what maybe I ought to do'. But we are not there now. Democracy doesn't allow us to talk in those terms. So the 'do as I please', which is sometimes more a license than freedom, makes us act out our lives in ways which ultimately we find out are not livable. We are moving into that kind of situation and we've been moving in that direction for at least two generations, since the second World War. Nature is telling us that we are moving in the wrong direction.

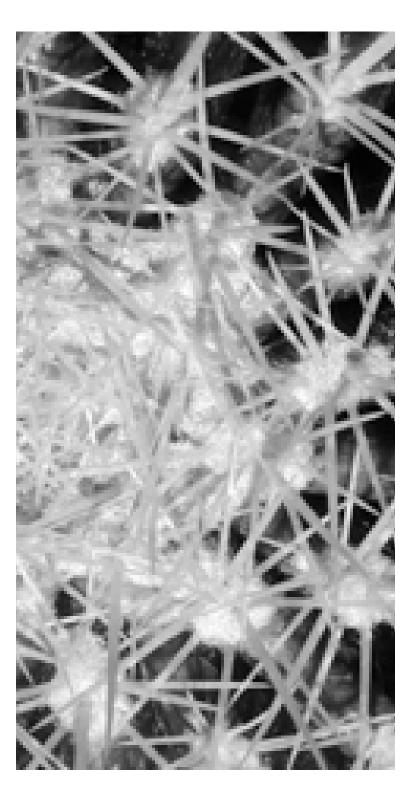
Arcosanti is not a flat land, it is a three-dimensional system and the reasons are very simple. Information and knowledge comes from clustering and if we don't cluster there is no life. The brain is a very good example. The brain exists in such a fantastic engine or machine because it's so minimal, so tiny, so complex, and that's where life is. Some might not like it but that's where life is. So to counter this example is to make a colossal mistake, and I don't think we are going to find a solution."

Jeff: "In your travels around the world you've been exposed to lots of other countries and cultures, many of whom regard the American way of life as being their goal. But I wonder whether you haven't been exposed to cultures that have other goals which you would find more acceptable, especially within your understanding of the bubbles as you began."

Paolo: "It seems to be in our nature as humans to seek some kind of transcendence. We transcend most of the time in tiny little steps, but that's very important. The pulse and desire and the drive is there. We might have to give this need for going beyond what we are, to what seems to be the nature of things. This stepping up into another kind of reality in many ways depends so much on how we work out our problems and our tendencies in terms of domain and control: this notion of freedom we cherish so much. Most of the time this takes us to extremes, which are not possible.

Let's take a physical condition. I was flying above China and for many hundreds of miles you could see the sustainable villages were very integrated and very lively and very admirable in many ways. Around each village there was the farmland. So the villages were distributed very geometrically. Within that kind of an economy, if the people in those villages get automobiles and take off in a direction of the Los Angeles mode, each village would become probably ten times as large as they are now. That means that all the land for food production is gone, all of it. In United States terms, that would be a step toward affluence and well being. Well here that would be the opposite, which would be catastrophe. So to exploit the American dream is something that I don't think is feasible nor is desirable. But that's what everybody wants to do. In China, in India, in Africa, in South America, everybody wants to get to a point where they can say I feel like a good citizen, like an American citizen. But that is catastrophe. The Chinese, twelve hundred million, would need about 600 million automobiles just to take one single object of affluence. Six hundred million there, 500 million in India, 500 million in Africa, and 600 million in South America and then Europe and US; so we become the victims of our own beloved automobile."





Jeff: "So have you used an estimate of how many earths it would take to support our present six billion people to an American lifestyle?"

Paolo: "The number has changed depending on the perspective. Let me go from 10 to 40. Ten planets could do it maybe. But evidently we could not produce the equivalent of ten planets within one or two generations, it might take a hundred generations. So there is a wall there that we cannot break. Somehow we have to alter our priorities and maybe find what we call happiness in an environment that is not the one that we are trying to develop now."

Jeff: "So Paolo, let me get personal. Why do you live here? How did you end up on Doubletree Road?"

Paolo: "You have to be in the middle of the mistake to try to do something about it. What I'm trying to do is to exemplify what I am talking about. Arcosanti is a very modest, limited, insufficient way, but we are working at it. We have thirty years of experience at what I call a lean economy. What I am proposing is an alternative to what we are doing now as Americans and as Europeans and eventually us earthlings. This alternative is to implode the habitat, adopt a threedimensional model so that we put boundaries in our physical presence, and create within those boundaries a fairly lively, what I call urban, effect. This is not a new concept; it's old, about 10,000 years or so. But now with the technological revolution, with scientific knowledge and with the population explosion, we are to a point where this is no longer something that we might have to face a few generations from now. Now is the time to face it or else."

Jeff: "So in your 30 years of experimentation at Arcosanti, what have you learned?"

**Paolo:** "A few things. Small communities are very difficult."

Jeff: "Well, so are big ones. And certainly social dimensions have always been challenging. . . But I think the question also comes with the relationship of density in the United States where there still is a lot of horizontal space and still some of those other resources; versus other continents, where the population density is much tighter, and where food and water are much more limited."

Paolo: "But the reality is, if there's a desert around me or a forest around me, and if I build a town that is 400 square miles, I know that I'm isolated from nature. Nature is no longer part of my life. That's what we're doing with the suburban and exurban sprawl; we are isolating ourselves from nature. And why, because we love nature and we want to be in the middle of nature, so this is the paradox that we're developing. We believe in, and by, and for, so I think that's a very delusional situation. So if you want to enjoy nature, we should collect ourselves as any natural living system does, and then have this contrast, and this ambivalence, and this beautiful experience of being an urban person, and being also a country person. Sprawl instantly and naturally destroys this ideal."



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Jeff: "How did your experience at Taliesin as a young man shape your thinking?"

Paolo: "It was very important and very enjoyable, but from there on I began to diverge from the Broadacre City idea of Mr. Wright. I think Broadacre City is an example of something wrong that gets wronger and wronger. After World War II there was the Levittown phenomena which was very visible and in many ways meaningful. But Levittown was very dreary and not very appealing. One thing Mr. Wright was great at doing was to make this Levittown model into a very glamorous process through his own genius in architecture, housing and so on. So I think this is an example where geniality and knowledge might help the wrong doing to become even wronger."

The automobile was a great instrument for Mr. Wright and still is a great instrument for every one of us. But there was almost a magic to it for Mr. Wright. He always had the best. And that was natural. The automobile was a recent invention so all of us thought this was a solution to our logistical problems. So we plunged into that kind of solution and we got Los Angeles, Phoenix, and everything else."

Jeff: "There's been the observation that Phoenix, the Valley of the Sun, is sort of the realization, however crude, of Frank Lloyd Wright's Broadacre City. A road every mile, a car in every garage."

Paolo: "Two cars, and bigger and bigger. So we put ourselves in a very critical position. There is no way that we can alter that in one generation. But we should begin to think in terms of moving away from this identification of the good life with a hyper-consumptive life. I don't think that has very much of a future."

Jeff: "...a favorite form of transportation? I bet I could guess."

Paolo: "A bicycle. We are bipeds, we are pedestrians. For instance, the question of obesity and the question of not wanting to use our legs is a very clear problem. So you go into a building and instead of exercising our legs on the stairs for one or two or five floors, you take the elevator. Then we go to a spa to get back some of the flexibility and some of the grace that we might carry with us."



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Jeff: "What discoveries have you made in your urban experiment at Arcosanti, especially about the idea of urban living versus access to nature?"

Paolo: "The access to nature is the one I am insisting. When I say that we should limit and contain our presence, which means three-dimensionally. And the reduction of the consumptive drift. At Arcosanti that's easy because we are so small so we don't have to take the car to go from one side of the city to the next. From my unit I can reach in a few seconds everything that is there; a cafe, the library, the ceramics, the foundry, the theatre, the coffee shop, the bakery, the friends. So it's a question for instance of, ten seconds, twenty seconds, sixty seconds, that's all. But that's a pattern that is very easy for us because we are so small but it's a pattern that has validity for any kind of size."

Jeff: "Simultaneously you do have access to pristine nature."

Paolo: "That's what I mean. Yes, we are on the edge between the urban image and very primitive nature: in this case, the wilderness and the canyon and etc. It challenges the ideal of having so much greenery in the habitat. Some of the most beautiful experiences in Europe are where you're going to a place where there is not one tree. It's just a presence of man in terms of architecture. So that's how we filter nature and we express it in aesthetic form. So I have more sympathy of limiting the size of our intervention and let nature explode on the edge of it. That way we have a very clear definition of what we are and what nature is."

Jeff: "What about the necessity of the preservation of wilderness, for our own survival."

Paolo: "I think that eventually, the wilderness might be saved by the mind. Because, as we know, the sun is going to give up. And when the sun gives up, if the biosphere is still here the biosphere is gone. Not instantly, but within three generations of life. So what we have now is a gift of immense proportion and should be respected. We should be the caretakers. Besides being caretaker or the notion of stewardship, it is half of what reality asks from us. The other half is creation. So we cannot say that since the status quo now is what it is, it should be there forever. It's not going to happen that way. So in the long run, the memory of this beautiful process that has been the biosphere and is going to be a memory because it's not going to be here. Might be depending on the ability we have to memorize or to transfer the biosphere to somewhere else. The notion of wilderness has to be injected in this notion that eventually the biosphere is going."

Jeff: "But that's a long time away."

Paolo: "If we want to have a resolution, we have to pull in the whole of reality. And by resolution, I mean to find that there's a meaning of what now exists and possibly that meaning is so exciting and so immensely beautiful that we should work with it. Even if we don't know what it is now as yet?"

## "...the fact that the climate has

Jeff: "Maybe I'll take the privilege of the last question. In your presentation, you've related ideas in a very global scale and also inferred the importance of three-dimensional thinking. You've looked at things with a very long time frame. You haven't referred much to the immediacy except in terms of the stuff that's right under our nose. Do you have any thoughts about the loss of nature, which is already visible? The melting of the polarized caps? The holes in the ozone layer? The dramatic shifts in nature, of course nature will continue whether you and I are here or not. I assume that your concept of our human responsibilities take account for those immediate effects of nature. But you haven't discussed them."

"Well, the fact that the climate has been altered is a consequence of consumption. There is another consumption that we are developing now because we are coming up with cleaner industries. But we went through a period where industry was really dirty and now China for instance is an example of what you might call dirty technology. But we went through that and the fact remains that our consumption is so high that we are still the most pollutant nation on the earth. So notwithstanding the skill and the subtleties and the high quality of technology, we are demanding so much from the planet that we are still damaging the planet. There again, putting a ceiling to our consumption is something that is becoming mandatory. That is reflected by things that are very very simple, very elementary. If I have a box of Kleenex here and I pull one Kleenex out and blow my nose and throw it away, multiply that by 5 billions of people and you find out that Kleenex is a little forest. So I should do something about that and every single act of our daily routine covers this fact of consumption. The bigger our abodes the bigger is our consumption. It's inescapable."

Jeff: "So in conclusion, as an architect, you're really advocating a kind of dematerialization as a goal for future generations."

Paolo: "Well, I compare this country with Europe for instance, where there are apartments. They are very elegant, very sophisticated and very good because in many ways, instead of looking in the back yard of your neighbor, you look twenty miles this way and five miles that way. So the resistance of, almost the revulsion that we have of apartments might have to change; to think in terms of no longer living in my bungalow, but living up there in a very sophisticated space."

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## **Bubble Diagram**

- Political Correctness bubble is as big as the U.S.A. today.
- Historical Fitness bubble is as big as the summation of human history.
- Evolutionary Coherence bubble is as big as the summation of all biospheres peppering the cosmos up to date.
- Cosmic Relevance bubble is as big as the cosmos up to date.



Proportionately (scale) if the Political Bubble is the size of an atom, the Historical Bubble is the size of molecule, the Evolutionary Bubble is the size of a seed, and the Cosmic Bubble is the size of a solar system. [ 2001@Paolo Solari ]